

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/736,465 Confirmation No. 3466
Applicant : Jason Eubanks et al.
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Art Unit : 3671
Examiner: : Alicia M. Torres

Docket (atty ref.) No. : 16352-US
Title : MOWING IMPLEMENT ROTARY DISC CUTTER BAR
USED TOGETHER WITH A CROP-LIFTING
ARRANGEMENT

Moline, IL 61265
24 April 2008

Commissioner for Patents
P. O. Box 1450
Alexandria VA 22313-1450

APPEAL BRIEF

Real Party in Interest

The real party in interest is Deere & Company to which all rights in this application was assigned by applicants per the assignment document recorded in the United States Patent and Trademark Office on 12/15/2003 at REEL/FAME: 014826/0256.

Related Appeals and Interferences

There are no related appeals or interferences.

Status of Claims

Claims 1-10 are currently pending in the above-identified application.

Claims 1, 7 and 8 stand rejected.

Claims 2-6, 9 and 10 stand objected to.

This appeal is from the rejection of claims 1, 7 and 8. A copy of the claims as amended is set forth in the attached Appendix.

Status of Amendments

A first amendment, filed 10 August 2004, and containing an amendment to claim 1, was entered in its entirety and considered in the Final Rejection, dated 02 November 2004.

Summary of Claimed Subject Matter

The claimed subject matter relates to a mowing implement (10 in Figs. 1-3, described first at Paragraph 16, page 3, lines 6-17) equipped with a rotary disc cutter bar (40 in Figs. 1-3, described first at Paragraph 17, page 3, lines 18-31) having a gear housing (46 in Figs. 1-3, described first at Paragraph 17, page 3, lines 18-31) extending transversely, relative to a forward direction of travel during mowing operation, and including a plurality of transversely spaced, knife-carrying rotary discs (64 in Figs. 1-3, described first at Paragraph 21, page 4 lines 19-22) mounted, and being respectively driven, for rotating in desired directions above an upper surface of said gear housing for cutting and delivering crop into a discharge zone at the rear of the cutter bar (Paragraph 21, page 4 lines 19-22), a crop processing device (25 in Figs. 1-3, described first at Paragraph 22, page 4 lines 23-31) located in said discharge zone just downstream from said cutter bar, and a crop-lifting arrangement (92 in Figs. 1-3, described first at Paragraph 25, page 5, lines 16-24) for directing cut crop delivered by said rotary discs upwardly and rearwardly from said cutter bar so as to be in a favorable location for engagement by said crop processing device (Paragraph 28 page 6, lines 23-31 and page 7 lines 1-7), the improvement comprising: said crop-lifting arrangement including a lip (100 in Figs. 4 and 5, described first at Paragraph 27, page 5 line 31 and page 6 lines 1-22) extending transversely across, and projecting substantially upright from, at least a rear region of said cutter bar located just forward of said crop processing device (paragraph 28, page 6, lines 23-31 and page 7 lines 1-7); and said lip extending closely adjacent to, and to a height above, a path traced by knives of said knife-carrying rotary discs

(Paragraph 27, page 5 line 31 and page 6 lines 1-22 and paragraph 28, page 6, lines 23-31 and page 7 lines 1-7).

The claimed subject matter further to the combination, described above and wherein said lip is inclined upwardly and forwardly at an angle of approximately 60° to the horizontal (Figs. 3-5).

Grounds of Rejection to be Reviewed on Appeal

Claims 1, 7 and 8 are unpatentable, based on 35 U.S.C. 102(b) as being anticipated by Scarnato et al. (U.S. Patent No. 3,673,779)

Argument

Claims 1, 7 and 8 stand rejected, based on 35 U.S.C. 102(b), as being anticipated by Scarnato et al. It is respectfully submitted that Scarnato et al. do not disclose the lip structure set forth in claim 1.

Specifically, among other structure, claim 1 requires a crop-lifting arrangement including a lip extending transversely across and projecting **substantially upright** from, at least a rear region of the cutter bar, located **just forward** of the crop processing device, and for the lip to extend **closely adjacent to** and to a height **above** a path traced by knives of the knife-carrying rotary discs.

Scarnato et al. disclose (FIG. 4) a cutter bar including box beam structure 160 forming a gear housing and including top and bottom walls 161 and 162, and front and rear walls 163 and 164. Forming a rearward extension of the bottom wall 162 is a guide wall 170 which leads to the nip 125 established between upper and lower conditioner rolls 11 and 8, respectively.

It is clear that the guide wall 170 **does not extend upright** from the box beam structure 160, and in fact is almost coplanar with the bottom wall 162. While the Examiner contends that the guide wall 170 is just as upright as is the lip section 100 in FIG. 5, a simple measurement will show that the guide wall 170 makes an angle of approximately 20° with the horizontal while the lip 100 makes an angle of about 64° with the horizontal, a considerable difference. Further, It is clear that the guide wall 170 **does not extend closely adjacent** a path traced by knives of the knife-carrying

discs.

For the reasons stated above, claim 1 is not thought anticipated by Scarnato et al.

Claims 7 and 8 depend directly from claim 1 and are likewise thought allowable

Claim 7 is thought allowable for the additional reason that it requires the lip to be inclined upwardly and forwardly at an angle of approximately 60° to the horizontal, and it is clear that the guide wall 170 of Scarnato et al. is angled upwardly to **the rear, not forwardly**, as claimed.

Accordingly, it is respectfully requested that the Examiner's rejection of claims 1, 7 and 8 be reversed.

Any fees or charges due as a result of filing of the present paper may be charged against Deposit Account 04-0525.

Respectfully,

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Claims Appendix

1. In combination with a mowing implement equipped with a rotary disc cutter bar having a gear housing extending transversely, relative to a forward direction of travel during mowing operation, and including a plurality of transversely spaced, knife-carrying rotary discs mounted, and being respectively driven, for rotating in desired directions above an upper surface of said gear housing for cutting and delivering crop into a discharge zone at the rear of the cutter bar, a crop processing device located in said discharge zone just downstream from said cutter bar, and a crop-lifting arrangement for directing cut crop delivered by said rotary discs upwardly and rearwardly from said cutter bar so as to be in a favorable location for engagement by said crop processing device, the improvement comprising: said crop-lifting arrangement including a lip extending transversely across, and projecting substantially upright from, at least a rear region of said cutter bar located just forward of said crop processing device; and said lip extending closely adjacent to, and to a height above, a path traced by knives of said knife-carrying rotary discs.
2. The combination, as defined in claim 1, wherein said crop-lifting arrangement further includes a plurality of ramps, respectively positioned at locations between adjacent rotary discs and inclined downwardly and forwardly from a top of said lip to said upper surface of said housing.
3. The combination, as defined in claim 2, wherein said crop-lifting arrangement comprises a plurality of individual lifter units; each lifter unit including a lip section joined to a respective one of said plurality of ramps; and said lip sections cooperating to define said lip.
4. The combination, as defined in claim 3, wherein said gear housing includes an upright rear surface; an elongate mounting member extending lengthwise of said cutter bar and being fixed to said rear surface of said gear housing; and said individual lifter units being secured to said mounting member.
5. The combination, as defined in claim 4, wherein each ramp of each individual lifter unit has a vertical, transverse mounting plate fixed to an underside thereof; and

each mounting plate being fastened to said mounting member.

6. The combination, as defined in claim 3, wherein said ramp and lip section of each individual lifter unit make an angle of approximately 90° with each other.

7. The combination, as defined in claim 1, wherein said lip is inclined upwardly and forwardly at an angle of approximately 60° to the horizontal.

8. The combination, as defined in claim 1 wherein said lip is formed integrally with said gear housing.

9. The combination, as defined in claim 8, wherein said crop-lifting arrangement further includes a plurality of ramps formed integrally with said gear housing and inclined downwardly and forwardly to said upper surface of said gear housing from respective locations between adjacent gears.

10. The combination, as defined in claim 9, wherein said gear housing is constructed of a plurality of individual modules having opposite sides, with one side of one module being joined to one side of an adjacent module; and said crop-lifting arrangement being defined by individual lifting units respectively joined to upper rear regions of each of said individual modules; and each of said individual lifting units being defined by a lip section extending between a pair of ramp half sections, whereby ramp half sections of adjacent modules cooperate to define a whole ramp.

Evidence Appendix

None

Related Proceedings Appendix

None